

REMARKS

Claims 1-4, 7, 17, 20-24, 89-90 and 119-113 remain pending in this application. Claims 111-113 have been added. Claims 8-10, 13, 25, 29-31, 34, 36-37, 40-42, 44-88, 91-109 have been withdrawn.

Specification

A clean copy as well as a marked-up copy of the substitute specification are enclosed. No new matter has been added.

Information Disclosure Statement

On May 28, 2004 Applicants filed an Information Disclosure Statement. However, the Examiner has not returned an initialed copy of the PTO-1449 Forms. Accordingly, Applicants request the Examiner initial and return a copy of the attached PTO-1449 Forms to indicate that the documents have been considered.

Double Patenting

Without admitting to the propriety of the rejection, Applicant submits a terminal disclaimer to avoid the rejection.

35 U.S.C. §103

Claims 1-4, 7, 17 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Broun et al (U.S. Patent No. 5,431,970). This rejection is traversed as follows.

Applicant's Response to the Examiner's
"Response to Arguments Set Forth in
Numbered Paragraphs 17-20, on pages 5
and 6 of the Outstanding Office Action."

Each of the Examiner's arguments will be addressed in the order presented by the Examiner in the Office Action.

In numbered paragraph 18, the Examiner attempts to support the "Official Notice" taken that encapsulated Cordura® fabrics were known prior to the filing of the present application by citing U.S. Patent No. 5,876,792 to Caldwell and assigned to Nextec Applications, Inc.. Applicant wishes to point out to the Examiner that this patent issued on March 2, 1999, which was long after the filing of the present application. As such, it is submitted that encapsulating Cordura® was not one of "many well-known fabrics that are encapsulated to provide water resistance and breathability" (see Office Action mailed March 15, 2004), simply based upon the issuance of this patent. The portions of this patent relied upon by the Examiner were added to the previously filed specification which issued as U.S. Patents 5,004,643 ('643) and 5,418,051 ('051) and therefore does not have the benefit of the effective filing dates of those patents.

The '643 and '051 patents disclose a process for treating a porous web to produce a polymer internally coated web. These patents only state the word "encapsulation" twice and certainly do not disclose the encapsulation of Cordura®. Therefore, it is submitted that the Examiner's Official Notice regarding this matter is unsupportable.

In addition, Applicant's claimed combination of layers including an encapsulated cotton or cotton blend is clearly patentable over the prior art. Even the Examiner had agreed to this point since claims 26-28, 32 and 38 have already been **ALLOWED**. Applicant once again requests that the Examiner indicate the allowability of these claims in the next Office Action. The Examiner's recently discovered reference to Broun et al does not affect the allowability of those claims. The arguments made with respect to Broun et al in the response filed on May 28, 2004 are hereby incorporated by reference.

In numbered paragraph 19 of the Office Action, the Examiner argues that the breathability taught by Broun et al is applicable to the presently claimed invention since Applicant did not specifically set forth a rate associated with the term "breathable" and, as such, concludes that Applicant has not distinguished Broun et al. Indeed, if this were the standard placed upon applicants in order to distinguish their inventions from completely non-analogous prior art, the writing of specifications would become unduly burdensome and lengthy as well as contrary to the requirements of 35 U.S.C. §112.

The SUMMARY OF THE INVENTION section of the present application clearly states that an object of the present invention is to provide apparel that can quickly transfer moisture away from an individual's body so that the individual can feel more comfortable (see specification, p. 2, lines 5-7). In this context, it is submitted that Applicant has defined a rate of moisture transfer that excludes the breathable characteristics of the rifle bag of Broun et al, given that Broun et al disclose that their rifle bag required approximately twenty-four (24) hours to dry even after it was soaked with water and then rolled and squeezed to remove as much water as possible (see column 7, lines 25-61).

Applicant's apparel is such that moisture can be quickly transferred away while participating in certain activities such as in-line skating, snowboarding, hiking, etc. (see specification, p. 2, lines 8-13). According to Applicant's invention, moisture transfer must occur quickly even without subjecting the apparel to rolling and squeezing to remove as much moisture as possible, as in Broun et al.

Therefore, Applicant maintains that a specific numerical range defining "breathable", as apparently now being required by the Examiner, is not required by 35 U.S.C. §112. In addition, even if this were the case, Applicant's specification clearly defines an invention that excludes the breathability characteristics taught by Broun et al.

Nonetheless, Applicant has cited numerous materials in the specification that can be used in the various layers of the claimed apparel. Many of these materials are identified by their Trademark and have been tested and shown to have specific

moisture vapor transfer and/or waterproof performance characteristics. The present inventor has included these materials as examples because they satisfy the requirements of the apparel when assembled as claimed. For example, claim 1 recites "a first layer, closest to the individual, the first layer being an inner moisture transfer material; a second layer, abutting the first layer, including a foam material; a third layer, abutting the second layer, including a nonwoven material; and a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is encapsulated for waterproofing...".

Each of these carefully selected technical layers are discussed in the specification and have moisture transfer characteristics specific to technical apparel that is neither realized nor contemplated by Broun et al. This technical composite combination developed from the defined and selected materials enables the apparel to function as a waterproof/breathable moisture transfer system that keeps individuals that are engaged in active sports activities dry. The transfer of moisture and structural features of each of the materials listed in the specification is publicly available to one skilled in the art. Therefore, there is a rate of moisture transfer that is clearly defined and understood by one skilled in the art and that excludes the rifle bag of Broun et al. In addition, one of ordinary skill in the art would have no motivation to modify the rifle bag of Broun et al with its stated moisture transfer rates so as to replace each layer with layers that correspond to those in the present invention and then use the same for apparel. In other words, the technical

performance required in the industry of active apparel would exclude Broun et al's teaching as it does not meet the necessary requirements.

The Examiner is reminded that one of ordinary skill in the art of technical apparel would not look at Broun et al's disclosure in a vacuum, but would bring some expertise about such apparel and certainly not arrive at the conclusion suggested by the Examiner. The Examiner's conclusion does not properly view the obviousness issue from the eyes of one of ordinary skill in the art of technical apparel.

With respect to numbered paragraph 20, Applicant submits that the Examiner has misstated Applicant's position. Applicant did not merely state that since Broun et al disclose a bag that can carry clothing, that therefore the material in the bag cannot be used to form clothing. Instead, Applicant's argument is that given the detailed disclosure of Broun et al with respect to the use of their material for a bag with stated moisture transfer test results, one of ordinary skill in the art would not be motivated to apply this material to apparel. In particular, one of ordinary skill in the art would not be motivated to apply this material to technical apparel that has to quickly transfer moisture in order to keep an individual dry during certain activities. Applicant further stated that Broun et al disclosed the carrying of clothing with their bag. Therefore, Broun et al specifically discussed clothing as only something that could be carried by the bag. This, in combination with the remaining disclosure of Broun et al, would lead one of ordinary skill in the art away from applying Broun et al's material to clothing.

The Examiner is requested to consider the entire argument presented as opposed to a single sentence. If Applicant's entire argument is considered, the only reasonable conclusion is that the teaching of Broun et al cannot be applied to apparel and would not function as claimed.

In addition, in light of Broun et al's description of an inexpensive, disposable bag, it is difficult to imagine why one of ordinary skill in the art would attempt to modify the material forming the bag into apparel. Even if Official Notice is taken of encapsulation, to which Applicant strenuously disagrees, one of ordinary skill in the art would not be motivated to apply encapsulation technology to a material that is already water resistant and is intended to be disposable.

Independent claims 1 and 7 are directed to a four-layer composite, while Broun et al disclose a three-layer composite. In addition to the arguments made above with respect to the applicability of Broun et al's disclosure to apparel, it is further pointed out that there is no reason why one of ordinary skill in the art would take the extra step of adding an additional layer to the teaching of Broun et al to arrive at the presently claimed invention, absent hindsight reconstruction. Broun et al disclose an outer layer that can be a woven or nonwoven material and has a pore size that has water resistance characteristics. Given this disclosure, one of ordinary skill in the art would not be motivated to add an additional outer layer that is either treated by encapsulation or structurally knitted to repel water.

Finally, the Examiner's attention is directed to the fact that an important aspect of Broun et al's bag is the ability to float. As such, Broun et al have used material

that satisfy that criteria as well as the criteria of drying completely in 24 hours. The importance placed upon floatation by Broun et al adds further support to Applicant's argument that one of ordinary skill in the art would not be motivated to apply the teaching of Broun et al to apparel. Broun et al disclose that their foam material is provided to protect the contents of the bag from abrasion if dropped and also to provide floatation (See Column 4, lines 49-54). The emphasis the Broun et al place on floatation further removes their teaching from the presently claimed invention. The Examiner is reminded that just because similar words may be used by Broun, the relative inventions are completely different.

The person having ordinary skill in the art of technical apparel would have the ability to discern the differences between the

Assuming *arguendo* that the extreme proposition that one of ordinary skill in the art of technical apparel would be motivated to apply Broun et al's teaching to apparel is correct, one of ordinary skill in the art would still have to search for new materials to replace the materials used by Broun et al in order to arrive at technical apparel that is breathable and has moisture transfer characteristics that enable an individual engaged in certain activities to remain dry. All these additional steps further support the argument of nonobviousness. The Examiner is clearly interpreting the claims beyond their broadest reasonable interpretation.

Independent claims 1, 7, and 20

Claim 1 patentably defines the present invention over Broun et al. The text of Claim 1 is repeated below.

1. (Previously Presented) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising, on at least a portion of the apparel, a combination of layers comprising:
a first layer, closest to the individual, the first layer being an inner moisture transfer material;
a second layer, abutting the first layer, including a foam material;
a third layer, abutting the second layer, including a nonwoven material;
and
a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is encapsulated for waterproofing,
wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry.

Claim 1 recites an apparel having four layers and functions to keep individuals that are engaged in activities that generate moisture dry. The claim also specifies that the combination of layers is breathable. The fourth layer is encapsulated for waterproofing. This claim patentably defines the present invention over the disposable, three layer bag disclosed by Broun et al.

Claim 7 patentably defines the present invention over Broun et al. The text of claim 7 is repeated below:

7. (Previously Presented) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising, on at least a portion of the apparel, a combination of layers comprising:
a first layer, closest to the individual, the first layer being an inner moisture transfer material;
a second layer, abutting the first layer, including a foam material;

a third layer, abutting the second layer, including a nonwoven material;
and
a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is selected from fabrics that are structurally knitted or woven to repel water,
wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry.

Claim 7 recites an apparel having four layers and functions to keep individuals engaged in activities that generate moisture dry. The claim also specifies that the combination of layers is breathable. The fourth layer is structurally knitted or woven of repel water. This claim patentably defines the present invention over the disposable, three layer bag disclosed by Broun et al.

Claim 20 patentably defines the present invention over Broun et al. The text of claim 20 is reproduced below:

20. (Previously Presented) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising on at least a portion of the apparel, a combination of layers comprising:
a first layer, closest to an individual, the first layer being an inner moisture transfer material; and
a second layer comprising an outer moisture transfer material comprised of natural fibers or a blend of natural and synthetic fibers that are encapsulated for waterproofing,
wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the second layer so as to keep the individuals dry.

Claim 20 recites an apparel having two layers and functioning to keep individuals engaged in activities that generate moisture dry. The claim also specifies that the combination of layers is breathable. The second layer is a moisture transfer

material that is encapsulated for waterproofing. This claim patentably defines the present invention over the disposable, three layer bag disclosed by Broun et al.

Dependent claims 2-4 add further limitations to independent claim 1, with respect to lamination and mechanical bonding and, in combination with the limitations of claim 1, further define the present invention over Broun et al.

Dependent claim 17 adds further limitation to independent claim 7, by reciting that the second layer and third layer are formed as an elastomeric composite having the nonwoven material combined with the foam material in a single process. Such limitation in combination with the limitations of claim 7, further defines the present invention over Broun et al.

New Claims 111-113

New claim 111 is similar to claim 1, except that it recites that "the combination of layers is breathable and enables moisture vapor to be quickly transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry while they are engaged in activities that generate moisture" (underlining added). This claim is being added for consideration by the Examiner, so that the Examiner may properly consider alternate language that may be more acceptable to the Examiner. New claim 111, clearly distinguishes Broun et al by stating that the quick transfer of moisture permits individuals to stay dry while engaged in activities that generate moisture. It is submitted that the specification adequately supports the word "quickly" and the materials disclosed in the specification provide more than

adequate support for its meaning. Therefore, this claim satisfies the limitation of 35 U.S.C. §112, first and second paragraphs. However, Applicant maintains that such language is not necessary for patentability.

New claim 111 certainly distinguishes over the disposable bag of Broun et al, which takes far too long to dry even after being soaked and squeezed to be considered for apparel that functions as claimed. This claim also further emphasizes the significant differences between the disclosure and purpose of Broun et al and the technical apparel disclosed in the present application.

New claims 112 and 113 recite performance characteristics for the technical apparel. It is submitted that these claims also patentably define the present invention over Broun et al.

Conclusion

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued.

Respectfully submitted,

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BAY-310

Amendments to the Drawings

Attached are six (6) sheets of formal drawings Figs. 1-6. These replace informal drawings filed with the application. No new matter has been added.